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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,030	09/27/2001	Yoshikatsu Niwa	450100-03503	2594

20999 7590 12/21/2004

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EXAMINER

SHIN, KYUNG H

ART UNIT PAPER NUMBER

2143

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application N .</b> 09/965,030	<b>Applicant(s)</b> NIWA ET AL.	
	<b>Examin r</b> Kyung H Shin	<b>Art Unit</b> 2143	

**-- The MAILING DATE f this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 September 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is responding to application papers dated 9/27/2001
2. Claims **1 - 12** are pending. Independent claims are **1, 5, 9**.

### ***Claim Rejection-35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1 - 3, 5 - 7, 9 - 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Yeung (US Patent No. 6,643,702)** in view of **Johnson et al. (US Patent No. 6,625,745)**

**Regarding Claims 1, 5, 9**, Yeung discloses a data transfer apparatus, network system, data transfer method selecting an input and output port (bus) from among a plurality of buses for network communications. (see Yeung col. 2, lines 44-56: “... a switch ... stores switched packet streams to be transmitted ... having ingress ports 321-324 and egress ports 331-334. The number of ingress ports and egress ports in the switch may vary depending on ... how many devices or buses are served by the switch ...”)

Yeung does not disclose determining that the destination node is not connected. However, Johnson discloses a data transfer apparatus, network system, data transfer

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method for connecting buses comprising:

transmitting means for determining according to the destination information whether the node serving as the destination of the data is connected to one of the buses, and, when it determines that the node is not connected, for transmitting predetermined error information to the data transmission source. (see Johnson col. 4, lines 9-15; col. 10, lines 46-50: path analysis and failure notification sequence or predetermined alarm (action) is completed when it is determined that destination node is not connected or path fault)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yeung to determine that the destination node is not connected as taught by Johnson. One of ordinary skill in the art would be motivated to employ Johnson in order to optimize performance by providing accurate connectivity and diagnostic information in network communications. (see Johnson col. 2, lines 18-20: “... provides an efficient method and system for providing accurate connectivity and diagnostic information for network components ...”; col. 2, lines 55-58: “... test signals are sent over identified paths to resolve ambiguities with respect to components that are identified as likely failing components ...”)

**Regarding Claims 2, 6, 10,** Yeung discloses a data transfer apparatus selecting an input and output port (bus) from among a plurality of buses for network communications. Yeung does not disclose the determination that the destination node is not connected. However, Johnson discloses a data transfer apparatus, network

system, data transfer method according to claims 1, 5, 9, wherein the transmitting means determines according to the destination information whether the bus to which the node serving as the destination of the data is connected exists on a network, and when it determines that the bus does not exist, transmits predetermined error information to the data transmission source. (see Johnson col.4, lines 9-15; col. 10, lines 46-50: path analysis and failure notification sequence or predetermined action (alarm) is completed when it is determined that destination node is not connected or path fault)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yeung to determine that the destination node is not connected as taught by Johnson. One of ordinary skill in the art would be motivated to employ Johnson in order to optimize performance by providing accurate connectivity and diagnostic information in network communications.

**Regarding Claims 3, 7, 11,** Yeung discloses a data transfer apparatus, network system, data transfer method according to claims 1, 5, 9, wherein the data transfer apparatus is connected to the another bus through another data transfer apparatus, and the data transfer apparatus comprises transfer means for transferring the data from the data transfer apparatus to the another data transfer apparatus according to the destination information. (see Yeung col. 2, lines 44-56: destination network node is another data processing apparatus)

5. **Claims 4, 8, 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over

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**Yeung-Johnson and further in view of Kraiem et al. (US Patent No. 6,370,369) and further in view of Lappetelainen et al. (US Patent No. 6,693,915).**

Yeung-Johnson discloses a data packet processing system to transfer data packets on a IEEE 1394 bus with multiple input and output ports (buses). Yeung-Johnson discloses a data processing system that determines whether the destination address is connected. (see Yeung col. 2, lines 44-56: “ ... *a switch ... stores switched packet streams to be transmitted ... configured to switch packets on a IEEE 1394 Standard Serial Bus ... having ingress ports 321-324 and egress ports 331-334. The number of ingress ports and egress ports in the switch may vary depending on ... how many devices or buses are served by the switch ...*”) (see Johnson col. 2, lines 18-20: “ ... *an efficient method and system for providing accurate connectivity and diagnostic information for network components ...*”)

**Regarding Claims 4, 8, 12,** Yeung-Johnson discloses an IEEE 1394 data transfer apparatus, but it is not based on the BRAN specification. Lappetelainen discloses that the BRAN specification is equivalent to the HIPERLAN specification. (see Lappetelainen col. 1, lines 46-51: HIPERLAN specification equal to BRAN specification)

Kraiem also discloses a IEEE 1394 data transfer apparatus based on the HIPERLAN specification. (see Kraiem col. 1, lines 11-17; col. 1, lines 56-60: HIPERLAN (High Performance Radio Access Network) or BRAN (Broadband Radio Access Network) specification and wireless IEEE 1394 standards for a network device used in data transmissions) Therefore, the combination of Kraiem and Lappetelainen

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discloses a data transfer apparatus according to claims 1, 5, 9, wherein the data transfer apparatus is a IEEE-1394 bridge device conforming to the BRAN specification.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yeung-Johnson to utilize a wireless IEEE 1394 device operating as a bridge based on the BRAN specification as taught by Kraiem-Lappetelainen. One of ordinary skill in the art would be motivated to employ Kraiem-Lappetelainen in order to interconnect IEEE 1394 buses in a wireless network environment. (see Kraiem col. 1, lines 5-10: “ *... transmit and receiving antenna diversity in wireless networks ... network devices, e.g. mobile terminals, directly communicate with each other without using a central station or access point as repeater ...* ”; col. 2, lines 32-37: “ *... network devices can easily be adapted to the inventive method without considerable changes in hardware, but by mainly providing the new control method for antenna diversity ...* ”) (see Lappetelainen col. 4, lines 52-57: “ *... attain more effective utilization of the radio resources ... produce a more disturbance-free data transmission system ...* ”)

### **Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyung H Shin whose telephone number is (571) 272-3920. The examiner can normally be reached on 9 am - 7 pm.

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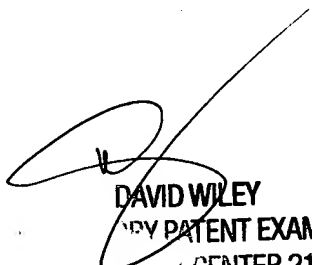
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KHS

Kyung H Shin  
Patent Examiner  
Art Unit 2143

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Dec. 9, 2004



DAVID WILEY  
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